



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,398	01/30/2006	Yoshichika Konishi	Q92813	5718
23373 7590 09/05/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER AMINZAY, SHAIMA Q	
			ART UNIT 2618	PAPER NUMBER
			MAIL DATE 09/05/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/566,398

**Applicant(s)**

KONISHI ET AL.

**Examiner**

Shaima Q. Aminzay

**Art Unit**

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### ***DETAILED ACTION***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 30, 2007 has been entered.

### ***Response to Arguments***

1. Response to arguments with respect to the rejected claims 1-6 is **moot** as the amendments to the independent claims 1, 5, and 6 meets the requirements, therefore, the Claim Rejections-35 USC 112 First Paragraph with respect to claims 1-6 withdrawn.
2. Response to arguments with respect to the rejected claims 1-6 are **moot** as the amendments to the independent claims overcome the claim rejections, therefore, the Claim Rejections-35 USC 102(e) with respect to claims 1-6 withdrawn.

***Claim Rejections – 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action: in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gorday (Gorday et al. U. S. Patent 6,665,521) in view of O'Sullivan (O'Sullivan, US Patent RE39,427).

Regarding claim 1, Gorday discloses a mobile communication apparatus (*e.g., Figures 1-2, column 1, lines 6-24, column 2, lines 1-39, wireless devices (mobile communication apparatus) 22, 24, 26, 28, 29, 30, 32, 34, 36, 38, and 40*) comprising:  
reception means for receiving information (*e.g., Figures 1-4, Abstract, lines 1-11, column 2, lines 60-66, receiving information*);  
transmission means for transmitting information (*e.g., Figures 1-4, column 3, lines 57-67 continued to column 4, lines 1-14, transmitting the information*);  
surrounding environment detection means for detecting communication obstacles which shield wireless signals (*e.g., Figures 1-4, column 3, lines 9-28, column 4, lines 3-10, column 5, lines 1-7, lines 16-26, evaluating the environmental barriers (obstacles) such as building that effects the wireless communication link quality by blocking the path of*

Art Unit: 2618

*the signals);*

communication state decision means for making decisions as to the communication state quality based on detection results indicating whether or not there are communication obstacles [*shielding*] the wireless signals (*e.g., column 3, lines 9-28, column 4, lines 3-10, column 5, lines 1-7, lines 16-26, the decision is being made based on the state quality and detection of the presence or absence of communication interferences (obstacles) such as buildings' walls*);

and control means, which transmits received information via the transmission means when the surrounding environment detection means detects no communication obstacles (*e.g., Figures 1-4, column 3, lines 9-28, line 67 continued to column 4, lines 1-10, column 5, lines 1-7, lines 16-26, lines 51-57, column 7, lines 23-33, column 8, lines 1-4*) and the communication state decision means decides that the mobile unit is in a satisfactory communication state (*e.g., Figures 1-4, column 1, lines 6-24, column 3, lines 9-28, line 67 continued to column 4, lines 1-10, column 5, lines 1-7, lines 16-26, lines 51-57, column 7, lines 23-33, column 8, lines 1-4*).

Gorday does not specifically teach shielding the signal, however, Gorday teaches the effect of the environmental obstacles affecting the wireless communication signals (*e.g., column 3, lines 9-28, column 4, lines 3-10, column 5, lines 1-7, lines 16-26, the environmental obstacles such as the surrounding walls of the building effects the transmission signal quality of the wireless device*).

In a related art dealing with wireless communications (*e.g., column 17, lines 6-57*), O'Sullivan teaches the shielding of signals caused by the environmental obstacles (*e.g.,*

*column 2, lines 18-36, column 4, lines 23-43).*

It would have been obvious to one of ordinary skill in the art at the time invention was made to have included O'Sullivan's wireless device transmission link shielding determination with Gorday's wireless device transmission link quality determinations to provide the wireless device with transmission link quality including error correction to determine the environmental obstacles and to providing flexible wireless communications (*e.g., column 4, lines 23-43, column 13, lines 1-12*).

Regarding claim 5, Gorday discloses a mobile communication apparatus (*e.g., Figures 1-2, column 1, lines 6-24, column 2, lines 1-39, wireless devices (mobile communication apparatus) 22, 24, 26, 28, 29, 30, 32, 34, 36, 38, and 40*) comprising:

reception means for receiving information (*e.g., Figures 1-4, Abstract, lines 1-11, column 2, lines 60-66, receiving information*);

transmission means for transmitting information (*e.g., Figures 1-4, column 3, lines 57-67 continued to column 4, lines 1-14, transmitting the information*);

surrounding environment detection means for detecting communication obstacles which shield wireless signals in the surrounding environment (*e.g., Figures 1-4, column 3, lines 9-28, column 4, lines 3-10, column 5, lines 1-7, lines 16-26, evaluating the environmental barriers (obstacles) such as building that effects the wireless communication link quality by blocking the path of the signals*);

communication state decision means for making decisions as to the communication state quality based on detection results indicating whether or not there are communication

obstacles [*shielding*] the wireless signals (*e.g., column 3, lines 9-28, column 4, lines 3-10, column 5, lines 1-7, lines 16-26, the decision is being made based on the state quality and detection of the presence or absence of communication interferences (obstacles) such as buildings' walls*);

and control means, which transmits, via the transmission means, information received by the reception means (*e.g., Figures 1-4, column 3, lines 9-28, line 67 continued to column 4, lines 1-10, column 5, lines 1-7, lines 16-26, lines 51-57, column 7, lines 23-33, column 8, lines 1-4*) if the communication state decision means decides that the mobile unit is in a satisfactory communication state (*e.g., Figures 1-4, column 1, lines 6-24, column 3, lines 9-28, line 67 continued to column 4, lines 1-10, column 5, lines 1-7, lines 16-26, lines 51-57, column 7, lines 23-33, column 8, lines 1-4*).

Gorday does not specifically teach shielding the signal, however, Gorday teaches the effect of the environmental obstacles affecting the wireless communication signals (*e.g., column 3, lines 9-28, column 4, lines 3-10, column 5, lines 1-7, lines 16-26, the environmental obstacles such as the surrounding walls of the building effects the transmission signal quality of the wireless device*).

In a related art dealing with wireless communications (*e.g., column 17, lines 6-57*), O'Sullivan teaches the shielding of signals caused by the environmental obstacles (*e.g., column 2, lines 18-36, column 4, lines 23-43*).

It would have been obvious to one of ordinary skill in the art at the time invention was made to have included O'Sullivan's wireless device transmission link shielding determination with Gorday's wireless device transmission link quality determinations to

provide the wireless device with transmission link quality including error correction to determine the environmental obstacles and to providing flexible wireless communications (e.g., column 4, lines 23-43; column 13, lines 1-12).

Regarding claim 6, Gorday discloses a mobile communication apparatus (e.g., Figures 1-2, column 1, lines 6-24, column 2, lines 1-39, wireless devices (mobile communication apparatus) 22, 24, 26, 28, 29, 30, 32, 34, 36, 38, and 40) comprising:

reception means for receiving information (e.g., Figures 1-4, Abstract, lines 1-11, column 2, lines 60-66, receiving information);

transmission means for transmitting information (e.g., Figures 1-4, column 3, lines 57-67 continued to column 4, lines 1-14, transmitting the information);

surrounding environment detection means for detecting communication obstacles which shield wireless signals in the surrounding environment (e.g., Figures 1-4, column 3, lines 9-28, column 4, lines 3-10, column 5, lines 1-7, lines 16-26, evaluating the environmental barriers (obstacles) such as building that effects the wireless communication link quality by blocking the path of the signals);

communication state decision means for making decisions as to the communication state quality based on the detection results indicating whether or not there are communication obstacles [shielding] the wireless signals (e.g., column 3, lines 9-28, column 4, lines 3-10, column 5, lines 1-7, lines 16-26, the decision is being made based on the state quality and detection of the presence or absence of communication interferences (obstacles) such as buildings' walls);



and control means, which transmits, via the transmission means, the information received by the reception means only if no information identical to that information is received again within a predetermined period of time after its receipt (*e.g., Figures 1-4, column 3, lines 9-28, line 67 continued to column 4, lines 1-10, lines 37-45, column 5, lines 1-7, lines 16-26, lines 51-57, column 7, lines 23-33, column 8, lines 1-4*) when the communication state decision means decides that the mobile unit is in an unsatisfactory communication state (*e.g., Figures 1-4, column 3, lines 9-28, line 67 continued to column 4, lines 1-10, lines 37-45*).

Gorday does not specifically teach shielding the signal, however, Gorday teaches the effect of the environmental obstacles affecting the wireless communication signals (*e.g., column 3, lines 9-28, column 4, lines 3-10, column 5, lines 1-7, lines 16-26, the environmental obstacles such as the surrounding walls of the building effects the transmission signal quality of the wireless device*).

In a related art dealing with wireless communications (*e.g., column 17, lines 6-57*), O'Sullivan teaches the shielding of signals caused by the environmental obstacles (*e.g., column 2, lines 18-36, column 4, lines 23-43*).

It would have been obvious to one of ordinary skill in the art at the time invention was made to have included O'Sullivan's wireless device transmission link shielding determination with Gorday's wireless device transmission link quality determinations to provide the wireless device with transmission link quality including error correction to determine the environmental obstacles and to providing flexible wireless communications (*e.g., column 4, lines 23-43, column 13, lines 1-12*).

Regarding claim 2, Gorday in view of O'Sullivan teach all the limitations of claim 1, and further, Gorday teaches wherein, when the communication state decision means decides that the mobile unit is in an unsatisfactory communication state if the surrounding environment detection means detects the communication obstacles (*Figures 1-4, column 3, lines 9-28, line 67 continued to column 4, lines 1-10, lines 37-45, column 5, lines 1-7, lines 16-26, lines 51-57, column 7, lines 23-33, column 8, lines 1-4*), the control means transmits the information received by the reception means via the transmission means only if no information identical to the received information is received again within a predetermined period of time after its receipt (*Figures 1-4, column 3, lines 9-28, line 67 continued to column 4, lines 1-10, lines 37-45, column 5, lines 1-7, lines 16-26, lines 51-57, column 7, lines 23-33, column 8, lines 1-4*).

Regarding claim 3, Gorday in view of O'Sullivan teach all the limitations of claim 1, and further, Gorday teaches wherein the surrounding environment detection means is an imaging means installed in the mobile unit (*Figures 1-4, column 3, lines 9-28, column 5, lines 1-7, lines 16-26, lines 51-57, column 7, lines 23-33, column 8, lines 1-4*).

Regarding claim 4, Gorday in view of O'Sullivan teach all the limitations of claim 1, and further, Gorday teaches wherein the reception means and the transmission means is a wireless communication device (*Figures 1-4, column 3, lines 9-28, column 5, lines 1-7, lines 16-26, lines 51-57, column 7, lines 23-33, column 8, lines 1-4*).

### *Conclusion*

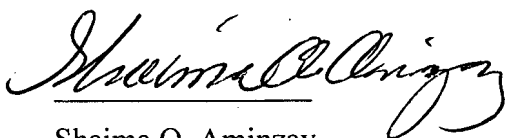
The prior art made of record considered pertinent to applicant's disclosure, see PTO-892 form.

### *Inquiry*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaima Q. Aminzay whose telephone number is 571-272-7874. The examiner can normally be reached on 7:00 AM -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew D. Anderson can be reached on 571-272-4177. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Shaima Q. Aminzay

(Examiner)

August 29, 2007



MATTHEW ANDERSON  
SUPERVISORY PATENT EXAMINER